

PROJECT TITLE : Additives and Analytical Services
Period Covered : September 24 - October 27, 1980
Report Written by : A. Widmer
Report Approved by : F. Lopes

TRIALS WITH NEW SUPPLIERS OF TOBACCO ADDITIVES

- Diammonium phosphate (HETAKO, Evonniaz/yellow sheet 5675, 100 g) - Ref: 1
Out of specifications
- Diammonium phosphate (HETAKO, Evonniaz/yellow sheet 5795, 250 g) - Ref: 1
Within specifications. As this product is significantly more expensive than the products of the other four potential suppliers, no further action is planned for the moment.
- Diethylene glycol (BASF, Ludwigshafen/PMG Berlin) - Ref: 2
The sample is within specifications. We suggested to produce test-cigarettes with this product.
- Invert sugar (DEVOLDER, Bruxelles/ 1 kg) - Ref: 3
The sample is within specifications. For an industrial trial 20 kg were ordered (27.10.1980).
- Sodium chloride (SOCIETE D'AGRICULTURE ET DE VITICULTURE, Cornaux; ex SCHWEIZERISCHE RHEINSALINEN AG, Schweizerhalle/yellow sheet 5842, 1000 kg)
The specifications for sodium chloride were modified (Ref: 1). The first shipment corresponds entirely to our new specifications.

TRIALS WITH NEW SUPPLIERS OF FILTER ADDITIVES

- Activated charcoal (ZÜLLIG OVERSEAS EXPORT, Zürich; "C.G. 8004008"/yellow sheet 5853, 37 kg)
The sample which was foreseen for an industrial trial was refused.
Reason: The granulometric analyses showed a value of 1.1 % (specifications: < 0.05 %) of the fraction > 100 mesh.
- Methoxy polyethylene glycol 550 (HODAG CHEMICALS INTERNATIONAL, Sokie(USA) /yellow sheet 5878, 5 kg)
The sample is out of specifications as regards water-content and molecular weight.
- Methoxy polyethylene glycol 750 (HODAG CHEMICALS INTERNATIONAL, Sokie(USA) /yellow sheet 5878, 5 kg)
The sample is out of specifications as regards water-content and acidity.

- Polyethylene glycol 600 (HODAG CHEMICALS INTERNATIONAL, Sokie (USA) / yellow sheet 5878, 5 kg)
Within specifications. 100 kg were ordered for an industrial trial (27.10.80).

- Methoxy polyethylene glycol 650 (PLÜSS STAUFFER AG, Oftringen; ex HOECHST, München / yellow sheet 5868, 5 kg)

Methoxy polyethylene glycol with an average molecular weight of 650 could replace the mixture of methoxy polyethylene glycol 550 and 750.

An average molecular weight of 636 was found in the sample. The other parameters (acidity, water, ashes, pH) were within specifications for methoxy polyethylene glycol 550. 100 kg were ordered for an industrial trial (13.10.80).

QUALITY CONTROL OF FILTER ADDITIVES

- Methoxy polyethylene glycol 550 (BP CHEMICALS) - Ref: 4

The sample, having a slight yellowish coloration, is within specifications as regards chemical parameters.

- Plasticizer "CA-50-FI" - Ref: 5

During application, the temperature of the solution (50 % Methoxy polyethylene glycol 550 and 50 % Methoxy polyethylene glycol 750) is maintained at 80°C. At the end of the stock the temperature in the cistern rises sometimes up to 120°C. A sample heated at 120°C during 24 hours showed an increase of acidity passing the limit of the specifications. On the other hand, the influence of the temperature on the average molecular weight is negligible. Instructions were given to the filter making department in order to supervise closely the temperature.

TRIALS WITH NEW SUPPLIERS OF GLUES

- Filter glue (Hot Melt) (LAESSER AG, Erlinsbach "LESSOTHERM 2088-1" / yellow sheet 5747, 3 kg)

Machineability: There is a significant difference to the standard. Instead of a speed of 380 m/min with the standard quality, only 340 m/min could be reached.

Concluded on September 29, 1980

- Filter glue (Hot Melt) (HENKEL CHEMIE GmbH, Pratteln; "TECHNOMELT Q 2266 T" / yellow sheet 5702, 8 kg)

Machineability: No significant difference compared with the standard glue. Storage: After two months, no difference compared with the standard could be observed.

The subjective evaluation showed a difference to the standard cigarettes. The sample was rejected.

Concluded on October 20, 1980

ASSISTANCE QC FOR OTHER COUNTRIES


- Determination of viscosity (PMH, Eindhoven) - Ref: 6
The viscosity in function of the temperature (20-90°C) was determined on the rotational BROOKFIELD - viscosimeter for honey and sorbitol.
- Determination of the flash-point (WELTAB, Bruxelles) - Ref: 7
The flash-points according to PENSKI-MARTENS, the density and the ethanol content were determined for MF-AC, PMF-AC, FAMA-AC and MF-UK Base.

SERVICES FOR OTHER GROUPS

- Analyses for Mr. P. Ghiste
Chloride in extracts (6 samples)
- Analyses for foil mentholating
Menthol in cigarettes (4 samples)
- Analyses for ETNA
Humectants in cut rag and expanded tobacco (14 samples)
- Analyses for Mr. J.P. Fatton
Density, refraction, water- and ethanol content in rum (1 sample)

QC ANALYTICAL SERVICES

A. Widmer



REFERENCES:

1. Monthly Report A. Widmer, August 1980
2. Letter from A. Widmer to Mr. W. Reinbold (PMG Berlin), dd Sept. 23, 80
3. Letter from A. Widmer to Mr. R. Devolder, dd Sept. 23, 1980
Monthly report A. Widmer, July 1980
4. Letter from A. Widmer to Mr. A. Schembri, dd Sept. 29, 1980
5. Letter from A. Schwarb to Mr. E. Ringgenberg, dd Oct. 16, 1980
6. Letter from I. Keller to Mr. B. van Duuren, dd Sept. 26, 1980
7. Letter from A. Widmer to Mr. H. Fauville, dd Oct. 27, 1980

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